

Kingman County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/28/2017

Using the most recent IMPLAN data available (2015) adjusted for 2017, 17 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Kingman County economy.¹

These 17 sectors have a total direct output of approximately **\$144.2 million** and support **884.5 jobs** in Kingman County. Running the model for all 17 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Kingman County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	884.5	16.50%	\$38,405,893	13.25%	\$144,214,691	49.74%
Indirect Effect	184.4	3.44%	\$15,326,615	5.29%	\$27,305,929	9.42%
Induced Effect	70.4	1.31%	\$3,676,897	1.27%	\$7,427,434	2.56%
Total Effect	1,139.2	21.25%	\$57,409,406	19.80%	\$178,948,053	61.72%

As shown in the above table, agriculture, food, and food processing sectors support **1,139.2 jobs**, or **21.25%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$179.0 million, roughly 61.72% of the economy.**

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 17 agriculture, food, and food processing sectors is approximately **\$57.4 million, or 19.80% of the GRP.** This indicates that personal income, business income, and taxes generated by these sectors account for **19.80% of the total economy.**

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **474.9 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Kingman County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	474.9	\$48,365,248
Grain farming	155.0	\$48,616,692
All other crop farming	131.1	\$8,466,435
Real estate	35.3	\$2,239,906
Animal production, except cattle and poultry and eggs	35.1	\$3,934,683
Farm machinery and equipment manufacturing	33.8	\$17,839,481
Support activities for agriculture and forestry	30.8	\$7,815,897
Truck transportation	21.6	\$2,839,208
Commercial hunting and trapping	18.5	\$4,406,800
Wholesale trade	18.0	\$3,988,794

The grain farming sector directly contributes approximately **\$48.6 million** to the Kingman County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Grain farming	155.0	\$48,616,692
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	474.9	\$48,365,248
Farm machinery and equipment manufacturing	33.8	\$17,839,481
All other crop farming	131.1	\$8,466,435
Support activities for agriculture and forestry	30.8	\$7,815,897
Oilseed farming	5.9	\$5,666,458
Commercial hunting and trapping	18.5	\$4,406,800
Wholesale trade	18.0	\$3,988,794
Animal production, except cattle and poultry and eggs	35.1	\$3,934,683
Bread and bakery product, except frozen, manufacturing	12.6	\$3,051,748

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Kingman County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	5.9	\$5,666,458.13
Grain farming	155.0	\$48,616,691.59
Vegetable and melon farming	0.7	\$141,087.90
Fruit farming	0.7	\$59,435.40
Tree nut farming	0.0	\$11.78
Greenhouse, nursery, and floriculture production	3.1	\$400,117.16
Cotton farming	0.3	\$71,259.84
All other crop farming	131.1	\$8,466,434.48
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	474.9	\$48,365,245.82
Poultry and egg production	3.5	\$2,510,301.83
Animal production, except cattle and poultry and eggs	35.1	\$3,934,682.37
Commercial hunting and trapping	18.5	\$4,406,800.75
Bread and bakery product, except frozen, manufacturing	12.6	\$3,051,748.28
Frozen cakes and other pastries manufacturing	0.2	\$25,911.36
Farm machinery and equipment manufacturing	33.8	\$17,839,481.35
Veterinary services	6.3	\$570,688.84
Landscape and horticultural services	2.7	\$88,330.97

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kingman County, the retail sector was omitted.